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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,347	11/25/2003	Osamu Azami	04995/129001	4741

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EXAMINER

RUDOLPH, VINCENT M

ART UNIT	PAPER NUMBER
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2625

NOTIFICATION DATE	DELIVERY MODE
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07/14/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/722,347	Applicant(s) AZAMI, OSAMU	
	Examiner Vincent Rudolph	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/30/2009 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kataoka ('165) in view of Beaudet ('795).

Regarding claim 1, Kataoka ('165) discloses a digital multiple function processing machine (**See Figure 1**) that includes an image data supply unit (scanner, **See Figure 1, Element 15**), an operation unit (control panel, **See Figure 1, Element 13**), and a printer (**See Figure 1, Element 16**), such that the image data supply unit can execute image data transmission image data transmission processing by generating and transmitting image data on an original set (the scanner scans images on a document for transmission, **See Col. 3, Line 43-46**), the operation unit enables a user to perform

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interrupt copy start command operation so that whenever it is performed, it transmits the interrupt copy start command information (user presses the interrupt key to start the process, **See Col. 4, Line 62-66**), and the printer can be connected to a computer (through the PC interface, **See Figure 1**) having a function of transmitting print job data (**See Col. 3, Line 10-12**), wherein the printer includes a print execution means (the device performs the function, thus it becomes the means) for forming an image on paper based on print data in a predetermined format (**See Col. 3, Line 46-49**), print data storage means and reception means (the device performs the function, thus it becomes the means) for temporarily storing print data to be processed and receiving print job data representing printed matter of several pages from the connected computer (the image memory stores data supplied from the computer, **See Col. 4, Line 10-12**), print job data processing means (the device performs the function, thus it becomes the means) for generating the print data concerning the printed matter for each page and storing the print data in the print data storage means (receiving the print data from the computer, **See Col. 3, Line 57-59**, and storing it in the image memory, **See Col. 4, Line 10-11**), and copy control means (the device performs the function, thus it becomes the means) capable of executing copy control processing of causing the image data supply unit to start the image data transmission processing (operation unit is used to performs setting and instruct the jobs, **See Col. 3, Line 26-31**), storing the print data responsive to the image data transmitted as a result of the transmission processing (**See Col. 4, Line 10-14**), and causing the print execution means to print based on the print data (**See Col. 3, Line 46-49**), if the interrupt copy start command information is received

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while the print job data processing means operates, the copy control means causes the print job data processing means to interrupt the processing being executed and, as a result, starts processing of waiting for a storage for executing the copy control processing to be formed in the data storage means so that whenever available storage area is formed, the print data being generated is interrupted and the copy control processing starts (whenever the copy interrupt key is pressed, the image memory can have sufficient amount to store the newly incoming data in order to prevent the data from overflowing the memory, **See Col. 6, Line 3-29**), such that a user is enabled to set a copy condition and transmit the information containing the copy condition information as the interrupt copy start command information (user is able to set various settings during the interruption for outputting the image data, **See Col. 3, Line 2-6**), the copy control means of the printer calculates the capacity of the available storage area required for executing the copy control processing based on the copy condition information included within the interrupt start command information (once the data is accumulated in the image memory, **See Col. 5, Line 40-42**, the memory is analyzed to see if the memory is less than the predetermined volume, **See Col. 5, Line 42-44**, in order to execute printing when the memory, which includes the print data, is below the predetermined volume as set by the user beforehand, **See Col. 5, Line 27-31**), and the copy condition information can be changed according to an operation performed by the user (the user is able to enter and set instructions, data and other information, or cancel any changes made during the interruption, **See Col. 3, Line 37-42**).

Kataoka ('165) does not disclose waiting for a sufficient available storage area prior to commencing the operation.

Beaudet ('795) discloses waiting for a sufficient available storage area prior to beginning the copying process (when the printer is in print mode and an interrupt button is pressed, it is determined when a sufficient memory is available for the scanned document in order to process the copy job, **See Col. 9, Line 61-Col. 10, Line 1**).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include determining when a sufficient storage is available, such as the one disclosed within Beaudet ('795), and incorporate it into the digital multiple function processing machine of Kataoka ('165) because it allows the data to be safely stored rather than deleting it if there is not an adequate amount of available storage space provided while interrupting the printing process.

Regarding claim 2, Kataoka ('165) discloses that the user is enabled to perform a print interrupt command as well as a copy start command operation as the interrupt copy start command operation (user is able to select the type of interrupt to perform, **See Col. 3, Line 2-5**) so that whenever the user performs the print interrupt command operation, transmits print interrupt command information as the element information (**See Col. 6, Line 34-42**) and whenever the user performs the copy start command operation, transmits copy start command information as the element information (**See Col. 4, Line 62-67**). Whenever the print interrupt command information is received while the print job data processing means operates, the copy control means of the printer causes the print job data processing means to interrupt the processing being

executed whenever the copy start command information is received after the print interrupt command information is received and, as a result, starts processing of waiting for a storage for executing the copy control processing to be formed in the data storage means so that whenever available storage area is formed, the print data being generated is interrupted and the copy control processing starts (if the copy interrupt key is pressed during printing, **See Figure 2; Col. 5, Line 61-64**, the process is interrupted and copying takes place, **See Col. 6, Line 7-9**, with the image memory having sufficient storage for the incoming data, **See Col. 6, Line 27-29**).

Kataoka ('165) does not disclose waiting for a sufficient available storage area prior to commencing the operation.

Beaudet ('795) discloses waiting for a sufficient available storage area prior to beginning the copying process (when the printer is in print mode and an interrupt button is pressed, it is determined when a sufficient memory is available for the scanned document in order to process the copy job, **See Col. 9, Line 61-Col. 10, Line 1**).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include determining when sufficient storage is available, such as the one disclosed within Beaudet ('795), and incorporate it into the digital multiple function processing machine of Kataoka ('165) because it allows the data to be safely stored rather than deleting it if there is not an adequate amount of available storage space provided while interrupting the printing process.

Regarding claims 4-5, the rationale provided in the rejection of claims 1-2 is incorporated herein. In addition, the digital multiple function processing machine of

claims 1-2 corresponds to the printer of claims 4-5 and performs the steps disclosed herein.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kataoka ('165) in view of Beaudet ('795) as applied to claims 1 and 4, and further in view of Mishima ('056).

Regarding claim 7, Kataoka ('165) does not disclose that the printer calculates a required memory capacity based on copy description specification information, the printer calculates a predicted time when the available memory capacity reaches the required memory capacity, when the calculated predicted time exceeds a stipulated time which the user can set, insufficient memory notification information is transmitted, and when the calculated predicted time is equal to or less than the stipulated time and an elapsed time since an execution time of calculating the predicted time matches the predicted time, the copy control processing is executed.

Mishima ('056) discloses that the printer calculates a required memory based on the copy description information (calculates the print data capacity and the required free memory currently available to register the data in order to have it processed to be printed, **See Col. 17, Line 35-43**), calculate the predicted time when the available memory capacity reaches the required memory capacity (displays the time and the amount of memory available after each job is completed, **See Figure 24**, in order to determine when the data is able to be registered and copied, **See Col. 17, Line 44-48**), such that when the calculated predicted time exceeds a stipulated time which the user

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can set, insufficient memory notification information is transmitted (when the user tries to register a job, a notification is displayed that the memory is currently full, **See Figure 23**, since a real time value inputted exceeds a stipulated time for any existing memory that is currently available to be used, **See Col. 17, Line 16-18**), and when the calculated predicted time is equal to or less than the stipulated time and an elapsed time since an execution time of calculating the predicted time matches the predicted time, the copy control processing is executed (whenever a predicted time is available for the memory, the user is able to register a job with a stipulated time included, **See Figure 49**, so that once reserved, **See Figure 50**, the start time is able to be executed since it equals the predicted time set, **See Col. 17, Line 39-42**).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include calculating the memory capacity needed, when the memory reaches the required capacity as well as when the calculated time exceeds, meets or is less than the stipulated time, such as the one disclosed within Mishima ('056), and incorporate it into the digital multiple function processing machine of Kataoka ('165) because it allows the user to know whether the print data is able to be processed, and if not immediately, when it can be processed so that an appropriate time is able to be inputted for the job to be successfully processed.

Regarding claim 8, the rationale provided in the rejection of claim 7 is incorporated herein. In addition, the digital multiple function processing machine of claim 7 corresponds to the printer of claim 8 and performs the steps disclosed herein.

Response to Arguments

Applicant argues that the prior art does not disclose calculating available memory capacity based on the copy condition information set by a user since, according to the applicant, it is distinct from determining available memory capacity based on a prescribed value as disclosed within the prior art. According to Kataoka, whenever the data is fully accumulated in the image memory, the memory is analyzed to determine if the capacity is less than the predetermined volume (**See Col. 5, Line 40-44**), which is used to execute printing when the memory, which includes the print data, is below the predetermined volume (**See Col. 5, Line 27-30**), so that the data is printed from the memory one page at a time (**See Col. 5, Line 61-Col. 6, Line 2**). Thus, the memory capacity, which includes the image data, available is calculated as set by the user beforehand (**See Col. 5, Line 30-31**). As a result, the prior art of Kataoka does meet the limitations of the claims as disclosed within the rejection above.

The applicant also argues that the prior art does not disclose that the copy condition can be changed according to an operation performed by the user. According to Kataoka, once the user enters into the interrupt condition, multiple selections are able to be entered and set, such as instructions, data and other information, as well as canceling any changes made during the interruption (**See Col. 3, Line 37-42**). Thus, the user is able to make any last minute modifications before outputting the image data. As a result, the prior art of Kataoka does meet the newly added limitations of the independent claims as disclosed within the rejection above.

Regarding the applicant's other arguments, the prior art of Mishima is maintained in combination with Kataoka and Beaudet and together does meet the newly added limitations of claims 7-8 as disclosed within the rejection above.

Based on these facts, **THIS ACTION IS MADE NON-FINAL.**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Rudolph whose telephone number is (571) 272-8243. The examiner can normally be reached on Monday through Friday 8 A.M. - 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vincent Rudolph
Examiner
Art Unit 2625

/Vincent Rudolph/
Acting Examiner of Art Unit 2625

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625